Fall 2013 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD0108 Reclamation District No. 0108 River Farms	Overall LMA Rating	Total LMA Miles 20.87						
Dated Here	Maintenance Deficiancy					Enforcement Design & Syste		
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments					0.73			
Slope Stability	0.01		0.01	0.05%				
Cracking	0.05		0.05	0.24%				
Supplemental								
USACE Erosion Survey	0.01		0.01	0.05%				
LMA Totals:	0.07	0.00	0.07	0.34%	0.73	0.00	0.00	0.00
Unit No. 01 Colusa Basin Drain LB	Overall Unit Rating	Total Unit Miles						
RD0108	A	20.59						
B / III	Maintenance Deficiancy			Enforcement Design & Syster Obsolescence				
Rated Item	M Miles U Miles M + 4U Miles Threshold		Threshold %	M Miles	U Miles	M Miles		
Earthen Levee								
Encroachments					0.73			
Slope Stability	0.01		0.01	0.05%				
Cracking	0.05		0.05	0.24%				
Supplemental								
USACE Erosion Survey	0.01		0.01	0.05%				
Unit Totals:	0.07	0.00	0.07	0.34%	0.73	0.00	0.00	0.00
Unit No. 02 Castle Properties RB	Overall Unit Rating	Total Unit Miles						
RD0108	A	0.28						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
No Items								
Unit Totals:	0.00	0.00	0.00	0.00%				

LMA District Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 0108 River Farms

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)			
* Overall LMA Rating (Fall Only)			A				
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.							
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.							
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.							
Comments							

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles
Unit No. 01 Colusa Basin Drain	Left	20.59

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	-		10/04/2013 - 10/04/2013	
DWR Inspector	John Williamson		John Williamson	
Accompanied By	Chad Navarrot RD 108		Chad Navarrot RD 108	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

Levee Mile	Category	Item	Location	Rating	Action/Comment	GPS Latitud	e/Longitude	Issue No.
Start End	Catogory	110111	ion 4	_ ਨੂ	, todotii ootiiiiioitt	Start	End	Photo
1	Earthen Levee	Operations & Maintenance Manuals		A Ma		o o DWR ID: DWR_RI	o o 00108_01_s _ 2013	J
2	Earthen Levee	Emergency Supplies & Equipment	LS	A Ma		o o DWR ID: DWR_RI	o o 00108_01_s _ 2013	·
3	Earthen Levee	Flood Preparedness & Training		A Ma		o o DWR ID: DWR_RI	o o 00108_01_s _ 2013	Ü
4 3.86 3.88	Earthen Levee	Cracking	CR	M Ma	CR1 : Monitor and have inspected by geotechnical engineer.	38.843048 ° -121.862460 ° - DWR ID: DWR_RI		Υ
5 5.56 5.56	Earthen Levee	Animal Control		C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.848592 ° -121.893017 ° - DWR ID: DWR_RI		
6 5.57 5.57	Earthen Levee	Animal Control		C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.848688 ° -121.893349 ° -		
⁷ 6.93 6.93	Earthen Levee	Animal Control	WS	C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.864891 ° -121.907285 ° -		
8 7.63 7.63	Earthen Levee	Animal Control		C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.873613 ° -121.913853 ° -		
9 9.28 9.28	Earthen Levee	Slope Stability	WS	M Ma	S1 : Repair slope instability.	38.897452 ° -121.914680 ° - DWR ID: DWR_RD		Υ
¹⁰ 9.28 9.28	Earthen Levee	Cracking		M Ma	CR1 : Monitor and have inspected by geotechnical engineer.	38.897453 ° -121.914680 ° -		Υ
11 9.99 9.99	Earthen Levee	Animal Control	WS	C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.907854 ° -121.914658 ° - DWR ID: DWR_RD		
¹² 11.35 11.35	Earthen Levee	Animal Control		C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.927354 ° -121.913455 ° - DWR ID: DWR_RD		
¹³ 11.52 11.52	Earthen Levee	Animal Control	WS	C Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	38.929757 ° -121.912128 ° -	·121.912128 °	
¹⁴ 14.22 14.24	Earthen Levee	Cracking		M Ma	CR1 : Monitor and have inspected by geotechnical engineer.	38.964848 ° -121.920245 ° - DWR ID: DWR_RD	·121.920537 °	Υ

* Location LS: Land Side WS : Water Side CR : Crown Rating

A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

LMR	Levee	Mile	Category	Item	Location *	Rating	Action/Comment	GPS Latitud	le/Longitude	Issue No.
No.	Start	End	Category	пеш	tion	ing +	Action/Comment	Start	End	Photo
15	14.54	14.54	Earthen Levee	Cracking	LS	A/W Ma	CR1 : Monitor and have inspected by geotechnical engineer.	38.968032 ° -121.924480 ° DWR ID: DWR_R	38.968032 ° -121.924480 ° D0108_01_f _ 2012_	Υ
16	18.26	18.26	Earthen Levee	Encroachments	WS	M En	PR : Prunings	39.006497 ° -121.973158 ° DWR ID: DWR_R	39.006497 ° -121.973158 ° ^{D0108} _01_f _ 2013	Υ
17	18.88	19.60	Earthen Levee	Encroachments	LS	M En	DT : Ditch	39.013245 ° -121.980795 ° DWR ID: DWR_R	39.021302 ° -121.988557 ° D0108_01_s _ 2012	Υ
18	19.29	19.29	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Toe scour at the bottom of a steep bank, large sections of the toe are sliding down. Erosion may be due to the upstream bend. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: CBD_19-2_L]	39.017516 ° -121.986374 °	39.016727 ° -121.985411 °	
								DWR ID:		

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

Levee Mile Report Line	4				
Start Levee Mile	3.86				
End Levee Mile	3.88				
Location	Crown				
Category	Earthen Levee				
Item	Cracking				
Cracking along the crown of the levee, fall 2013					

Levee Mile Report Line	9				
Start Levee Mile	9.28				
End Levee Mile	9.28				
Location	Water Side				
Category	Earthen Levee				
Item	Slope Stability				
Slope stability with cracking 1.2 inches open and					

Slope stability with cracking 1-2 inches open and 12 inches deep Fall 2013 The district is monitoring the site.

johngw_f_20131007_962.JPG

johngw_f_20131007_960.JPG

Levee Mile Report Line	9
Start Levee Mile	9.28
End Levee Mile	9.28
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

The cracking runs in a horseshoe pattern on the levee slope Fall 2013

johngw_f_20131007_963.JPG







* Location LS: Land Side WS: Water Side CR: Crown ** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

Levee Mile Report Line	10
Start Levee Mile	9.28
End Levee Mile	9.28
Location	Land Side
Category	Earthen Levee
Item	Cracking
Cracking on the landside	levee slope Fall 2013

johngw_f_20131007_961.JPG

Levee Mile Report Line	14
Start Levee Mile	14.22
End Levee Mile	14.24
Location	Land Side
Category	Earthen Levee
Item	Cracking

Small cracking along the shoulder of the crown, fall 2013.

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Levee Mile Report Line	14
Start Levee Mile	14.22
End Levee Mile	14.24
Location	Land Side
Category	Earthen Levee
Item	Cracking
It appears to have some	slope stability issues

with the cracking. Fall 2013

johngw_f_20131007_965.JPG







N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monit : Corrected : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

Levee Mile Report Line	15		
Start Levee Mile	14.54		
End Levee Mile	14.54		
Location	Land Side		
Category	Earthen Levee		
Item	Cracking		
A crack running along the landside shoulder app. 50' long. Fall 2012			

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Levee Mile Report Line	16
Start Levee Mile	18.26
End Levee Mile	18.26
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Piles of prunings are at the waterside berm. Fall 2013

johngw_f_20131007_966.JPG

joinigw_i_zororoor_cocior c				
Levee Mile Report Line	17			
Start Levee Mile	18.88			
End Levee Mile	19.60			
Location	Land Side			
Category	Earthen Levee			
Item	Encroachments			
Agricultural ditch				
johngw_f_20130924_878.jpg				







Location LS: Land Side WS : Water Side CR : Crown

M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.59	10/04/2013 10/04/2013	John Williamson

Levee Mile Report Line	17			
Start Levee Mile	18.88			
End Levee Mile	19.60			
Location	Land Side			
Category	Earthen Levee			
Item	Encroachments			
Agricultural ditch along toe of landside. Photo taken fall 2011.				
johngw_f_20130924_879.jpg				



Unit Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway		Unit Miles
Unit No. 02 Castle Properties	Right	0.28

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	-		09/24/2013 - 09/24/2013	
DWR Inspector	John Williamson		John Williamson	
Accompanied By	Chad Navarrot RD 108		Chad Navarrot RD 108	

Summer & Winter Inspections

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Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	09/24/2013 09/24/2013	John Williamson

I N	Levee Mile		Catagory	Item *	Rating ** + Location	Action/Comment	GPS Latitud	de/Longitude	Issue No.
No.	Start	End	Category	пеш	ng +	Action/Comment	Start	End	Photo
	0.01	0.28	Earthen Levee	Vegetation	LS A Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	38.799050 ° -121.724623 ° DWR ID: DWR_R	38.796268 ° -121.727943 ° D0108_02_f _ 2013_	Υ
2	2 0.01	0.01	Earthen Levee	Animal Control		A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.798992 ° -121.724643 ° DWR ID: DWR_R	38.798992 ° -121.724643 ° D0108_02_s _ 2013	Υ
;	3 0.09	0.09	Earthen Levee	Animal Control	LS A/W Ob	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.		38.798196 ° -121.725660 ° D0108_02_f _ 2012	Υ

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Mainter

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	09/24/2013 09/24/2013	John Williamson

Levee Mile Report Line	1			
Start Levee Mile	0.01			
End Levee Mile	0.28			
Location	Land Side			
Category	Earthen Levee			
Item	Vegetation			
The landside levee slope has been burned. Waterside vegetation is below 12 inches. Fall 2013				

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Levee Mile Report Line	2
Start Levee Mile	0.01
End Levee Mile	0.01
Location	Land Side
Category	Earthen Levee
Item	Animal Control
	·

No rodents but holes need to be backfilled. Spring 2013

johngw_f_20130917_118.JPG

Levee Mile Report Line	3
Start Levee Mile	0.09
End Levee Mile	0.09
Location	Land Side
Category	Earthen Levee
Item	Animal Control

A couple of rodent holes on the landside slope. Fall 2012

johngw_f_20130917_119.jpg







+ Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement